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Addendum to the Sky Trust Proposal:
Alternative Approaches to Elements of the Policy Framework

This document presents possible alternatives to specific aspects of the Sky Trust model. These proposals are presented by Commission staff to stimulate further thinking by parties in their pre-workshop comments. These proposals will be presented by staff at the March 7-9 workshop, and may be modified in light of party comment in advance of that time.

Alternatives to Section 4: The Framework

I. Page 6: "The CPUC is in the process of establishing annual and multi-year renewable energy goals and energy efficiency savings targets for each investor-owned utility, based on least-cost considerations (footnote omitted). *Under the proposed framework, these efforts would also be expressed as corresponding limits to carbon-based energy procurement.*"

Alternative #1: Rather than expressing procurement limits under Sky Trust as caps on fossil generation, the framework could emphasize limits on *GHG output per MWh of electricity service* – a "GHG budget" for the IOUs as a whole.

- Advantages: Unlike the present proposal, a GHG budget approach would allow the Commission and the IOUs to differentiate among fossil generation types in the planning and procurement process. After the energy efficiency and renewable energy goals are taken "off the top" of IOU load projections, IOUs would then have an incentive to procure those fossil resources with the lowest GHG impacts to meet remaining electricity needs. This approach would also allow for GHG sequestration.
- Disadvantages: The GHG budget approach requires a more detailed analysis of the GHG impacts of each fossil generation option presented to the IOU. This analysis would add complexity to an already complex IOU planning and procurement process.

II. Page 8: "The Energy Efficiency Trust would establish a bidding process for tradable allowances – that is, the right to procure carbon-based energy up to the annual procurement limits established by the CPUC. The IOUs would bid for these allowances with ratepayer funds. The proceeds from the sales of these allowances would, in turn, be used to fund energy efficiency programs, thereby reducing (or eliminating) the ratepayer

collections currently needed to fund these programs through the public goods charge and procurement rates."

Alternative #2: Renewable energy programs are also supported by Public Goods Charge collections. The Sky Trust funds "recycling" process could also include outlays to support these programs.

- Advantages: Including renewable energy programs in the Sky Trust funding mechanism increases the identified advantages of linking GHG limits to the procurement of preferred resources. Funding for renewable energy programs under the present proposal is not addressed
- Disadvantages: Creating a single pool of funds for both efficiency and renewable energy investments may cause these efforts to compete against each other for support, to the detriment of the established Commission goals for each resource.

Alternative #3: Rather than auctioning the entire amount of permits required to cover the total GHG emissions of the IOUs, the amount of permits representing each IOU's individual GHG goal could simply be allocated to the IOU. These goals would be ratcheted down on a regular, perhaps annual, basis, as envisioned by the present Sky Trust proposal. An auction would be conducted to cover permits *in excess of* the initial IOU GHG goal-based allocations, if the IOUs are unable to meet their GHG targets, with revenue from these auctions used to replace or supplement present funding via the PGC.

- Advantages: Designing the permit allocation process with specific reference to the portfolios of each IOU may allow the Commission to more effectively engage in the resource planning and procurement process with an eye towards limiting GHG emissions. A permit auction process that focuses solely on IOU underperformance against Commission targets may give a better indication of the appropriateness of the targets themselves.
- Disadvantages: Allocating, rather than auctioning, the majority of permits will reduce the amount of revenue generated for efficiency (and perhaps renewable energy) investments, maintaining a larger reliance on PGC funding for this purpose than would the original Sky Trust proposal. The Commission would need to establish GHG goals for each IOU individually, as opposed to establishing one goal for the IOU sector as a whole.

Alternative to Section 5: Utility Performance and Incentives

III. Page 1: "Under the proposed framework the CPUC would establish short- and long-term procurement goals for energy efficiency and renewable resources in its rulemaking proceedings, in coordination with other state agencies."

In conjunction with Page 14: "The procurement framework described in this paper creates a strong incentive for California electric and natural gas IOUs to aggressively

pursue energy efficiency and renewable energy alternatives by physically limiting the amount of carbon-based energy they (collectively) would be allowed to include in their resource portfolios. However, this attribute alone may not be sufficient to motivate utility managers to be as diligent as possible in minimizing ratepayer costs and risks, given the cost-of-service realities described above."

Alternative #4: The Commission could establish permit allocation rules that allow the IOU to retain ownership of any unused permits at the conclusion of a procurement period. For example, at the end of each year (or other scheduled interval) the Commission could perform a true-up comparing IOU performance, in terms of GHG emissions, with the amount of permits that IOU was granted and/or purchased via auction. Any excess permits, representing avoided GHG emissions beyond the annual goals set by the Commission, could be the property of the IOU, possibly to be banked for future years or sold to other entities inside or outside of California.

- Advantages: This approach would directly encourage the IOUs to exceed the goals set by the Commission for GHG reduction, by giving them the right to what is likely to be an increasing valuable asset – a state-sanctioned permit to release GHGs. This direct financial incentive adds an element to the Sky Trust proposal that may be missing in its present form – an "up side" for IOU managers and shareholders.
- Disadvantages: Allowing the IOUs to "bank" or sell permits into other markets may create challenges for the Sky Trust permit tracking and retirement system, including a requirement that the system be compatible with emerging standards elsewhere in the U.S., and perhaps worldwide. Allowing IOUs to reap a new financial reward via ratepayer-funded procurement may be controversial. There may also be "gaming" issues of concern in establishing the targets under this variation. In addition, unless this variation is coupled with a ratepayer cost-minimization requirement or performance incentives, the IOUs may still not have sufficient motivation to minimize ratepayer costs and risks.

Alternative #5: Rather than establishing specific goals for energy resources that do not emit GHGs (e.g., energy efficiency and renewables), the Commission could instead direct the IOUs to pursue the least-cost mix of energy options that meet established GHG targets, and are compatible with the specifics of each IOU's resource portfolio and service territory. Financial incentives would be awarded to the IOUs if their portfolio costs are lower than pre-specified per kWh and per therm cost thresholds (and penalties imposed if they exceed those thresholds), as long as the portfolio meets or exceeds the GHG targets.

- Advantages: Empowering the IOUs to pursue the most cost-effective resource options, as opposed to prescriptively establishing preferred levels of energy efficiency and renewable energy, may allow the Commission to achieve its GHG targets at lowest cost to ratepayers.

- Disadvantages: To the extent that this approach does not result in incremental additions of renewable generation of at least 1% of total sales per year, the Sky Trust model may be in conflict with RPS legislation. There may also be additional reasons, beyond the minimization of GHG emissions, that goals for specific levels of energy efficiency and renewable generation are be desirable as a matter of state policy.